UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

May 21, 2009

MEMORANDUM

SUBJECT: West Lake Landfill Site: Recommendations

FROM: Elizabeth Southerland, Acting Deputy Director Elizabeth Southerland
Office of Superfund Remediation and Technology Innovation

TO: Cecilia Tapia, Director
Superfund Division, Region 7

In response to your request for an evaluation of the remedy at the West Lake Landfill site, I had several Superfund and radiation experts (proficient in landfill remedies, radioactive waste remediation, and hydrogeology) from the Assessment and Remediation Division and the Office of Radiation and Indoor Air review the site remedial studies and May 2008 Record of Decision.

As a result of this review, and following our discussions about the site with you and your staff on May 12, 2009, we believe the region should include several measures to the selected remedy if not already included in the remedy. First, the proposed cap should meet UMTRCA guidance for a 1,000-year design period including an additional thickness to prevent radiation emissions. Second, air monitoring stations for radioactive materials should be installed at both on-site and off-site locations. Third, groundwater monitoring should be implemented at the waste management unit boundary and also at off-site locations. The groundwater monitoring program needs to be designed so that it can be determine whether contaminants from the landfill have migrated across the waste management unit boundary in concentrations that exceed drinking water MCLs. The groundwater monitoring program needs to measure for both contaminants that have historically been detected in concentrations above MCLs (e.g., benzene, chlorobenzene, dissolved lead, total lead, dissolved arsenic, total lead, dissolved radium, and total radium) and broader indicators of contamination (e.g., redox potential, alkalinity, carbonates, pH, and sulfates/sulfides). If the results of the groundwater monitoring program provide evidence that a plume of contaminants at concentrations above the MCLs has or is currently migrating beyond the waste management unit boundary, then the region should do further evaluations and take appropriate response actions. Fourth, flood control measures at the site should meet or exceed design standards for a 500-year storm event under the assumption that existing levee system is breached.